(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/063991 A2

(51) International Patent Classification⁷: C12N 15/30

(21) International Application Number:

PCT/US2004/043023

(22) International Filing Date:

20 December 2004 (20.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/531,479 19 December 2003 (19.12.2003) U 60/631,228 26 November 2004 (26.11.2004) U

- (71) Applicants (for all designated States except US): SEAT-TLE BIOMEDICAL RESEARCH INSTITUTE [US/US]; 307 Westlake Avenue North, Suite 500, Seattle, WA 98109-5219 (US). RUPRECHT-KARL-UNIVER-SITÄT HEIDELBERG [DE/DE]; Seminarstrasse 2, D-69117 Heidelberg (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KAPPE, Stefan, H.I. [DE/US]; 500 Wall Street, Apt. 1519, Seattle, WA 98121 (US). MATUSCHEWKI, Kai-Uwe, C. [DE/DE]; Dreikoenigst. 9, D-69117 Heidelberg (DE). MUELLER, Ann-Kristin [DE/DE]; Birkenweg 47, 69221 Dossenheim (DE).

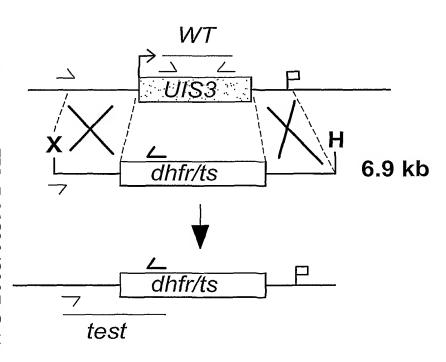
- (74) Agent: BLÖCHLINGER, Karen, B.; Christensen O'Connor Johnson Kindness PLLC, 1420 Fifth Avenue, Suite 2800, Seattle, WA 98101-2347 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: LIVE GENETICALLY ATTENUATED MALARIA VACCINE



(57) Abstract: Method for inoculating a vertebrate host against malaria, by administering to the host a live *Plasmodium* organism that is genetically engineered to disrupt a liver-stage-specific gene function.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.